



# Correlation of Body Shape Concern and Anxiety Severity among Sales Women in Medan

Elmeida Effendy\*<sup>1</sup>, Sarah A. Mardiyah, Nabilah A. Hasanuddin, Shela Gustirani

Department of Psychiatry, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

## Abstract

**BACKGROUND:** Body image was recognized as one of the major concerns of emerging adults as well as adolescents. The resulting dissatisfaction with body image has become a more universal phenomenon. Past research in body image has generally focused on women interested in the achievement of thin ideas.

**AIM:** Some findings suggest that problems with body image may underlie at least some social anxiety.

**METHODS:** A cross-sectional study using 135 sales women was conducted by self-reported measures (questionnaire). Body image dissatisfaction was measured using body shape questionnaire-34, anxiety score using Hospital Anxiety and Depression Scale (HADS). We use Kolmogorov-Smirnov test to assess the normality of the data and Pearson correlation test to assess the correlation between BSQ-34 and HADS.

**RESULTS:** The average age of our respondents was  $23.57 \pm 5.657$  and majority of them were graduated from high school ( $n = 97, 72\%$ ) and are not married yet ( $n = 109, 81\%$ ). Less than half admitted to have already worked for more than a year and we also found that most sales women in our study earned less than minimum standard wage a month ( $n = 103, 76\%$ ). We found that all of our respondents showed BSQ-score of above 81 ( $82.14 \pm 4.530$ ), indicating that all are slightly preoccupied with body shape concern. We also found that all respondents showed borderline anxiety score with an average score of  $8.20 \pm 3.256$ . Pearson correlation test showed that there is a significant positive moderate strength correlation between body shape concern and anxiety severity ( $r = 0.413, p = 0.002$ ).

**CONCLUSION:** This study revealed a significant positive relationship between the body shape concern and anxiety among saleswoman; our hypothesis was confirmed.

**Edited by:** Branislav Filipović  
**Citation:** Effendy E, Mardiyah SA, Hasanuddin NA, Gustirani S. Correlation of Body Shape Concern and Anxiety Severity among Sales Women in Medan. Open-Access Maced J Med Sci. 2022 Mar 25; 10(T7):146-149. <https://doi.org/10.3889/oamjms.2022.9247>  
**Keywords:** Anxiety; Body shape; Body image  
**\*Correspondence:** Elmeida Effendy, Department of Psychiatry, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia. E-mail: micipsych@yahoo.com  
**Received:** 07-Mar-2022  
**Revised:** 12-Mar-2022  
**Accepted:** 15-Mar-2022  
**Copyright:** © 2022 Elmeida Effendy, Sarah A. Mardiyah, Nabilah A. Hasanuddin, Shela Gustirani  
**Funding:** This research did not receive any financial support  
**Competing Interest:** The authors have declared that no competing interest exists  
**Open Access:** This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

## Introduction

Self-judgment is very important for humans, especially for women. Body image means the spiritual image that an individual has in his or her body and appearance. The perceptual components of body image are the way we see our size, shape, weight, face, movements, and behaviors, and the display/observation part is how we feel about these features and our emotions. Body image was recognized as one of the major concerns of emerging adults as well as adolescents. The resulting dissatisfaction with body image has become a more universal phenomenon. Past research in body image has generally focused on women interested in the achievement of thin ideas. However, recent studies have recognized that men also suffer from this complaint, especially for the lack of muscular physique [1], [2].

Many negative results were found to be associated with body image dissatisfaction (BID). These body image problems are associated with physical examination, trying to lose weight, excessive exercise, use of weight loss products, eating disorders, and eating disorders and trying to improve their looks. Negative

psychological consequences of these conditions include depression, stress, confident deterioration, and self-esteem [1].

BID is defined as a negative subjective assessment of one's own body weight and shape. Biological, interpersonal, and sociocultural factors, especially media exposure, are omnipresent and powerful, and therefore influence the occurrence of dissatisfaction with body image in both men and women. Previous literature has reported prevalence of body image complaints ranging from 19.5% to 77% among the general adolescent population. Complaints of higher body image are associated with less secure general attachment anxiety, romantic attachment, lack of confidence in interacting with others, and social anxiety. These findings suggest that problems with body image may underlie at least some social anxiety [3].

In a study among somatizing patients, while depression and anxiety associated with dissatisfaction with looks were high, BID showed that psychological variables were significantly associated with anxiety, especially due to the weakening of self-sensitivity experienced by individuals [3].

Despite the consequences of the epidemic, social anxiety has not received widespread attention in Asia, where humility and reservation are considered virtues. Socially uneasy individuals are generally considered unobtrusive and desirable in collectivistic culture. Nevertheless, social anxiety is an urgent issue. According to recent reports, these types of anxiety are widespread and there are attempts to resolve them in Asian culture. In Thailand, the first survey conducted to provide treatment for social anxiety raised awareness of the debilitating consequences [1].

## Methods

This cross-sectional numerical correlative study took place at several department stores that were selected from several districts in Medan, that is, Medan Polonia, Medan Barat, Medan Sunggal, and Medan Kota. We selected these districts, as apparently, majority of most well-known department stores in Medan are located at these districts. A study began in January till March 2021 and participants of this study were collected consecutively using inclusion and exclusion criteria. Our inclusion criteria are as follows; (1) age of 18–30 years old, (2) working as saleswomen, (3) fluent in Indonesian language, and (4) are willing to participate in the study. Participants, who are already diagnosed with psychiatry disorders, were excluded from the study. A total of 135 sales women were involved in this study. Subjects were given informed consent before the study and were requested to fill in personal data on participant's form. Direct interview was carried out in accordance with COVID-19 health protocol.

### Measurement

#### Body shape questionnaire-34 (BSQ-34)

BSQ-34 is a self-reporting questionnaire consisting of 34 question items focusing on how individual feels or perceives his/her appearance for the past 4 weeks. It was developed to assess perception or concern of one's body shape or appearance both in common or clinical population [4]. BSQ is scored in accordance with how often the individuals experience the symptoms, as in the following: 1 = Never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often, and 6 = always. This instrument can be completed in within 10 min [4].

In Indonesia, BSQ has been validated by Franky *et al.* in 2020 and showed high internal consistency reliability of 0.966. BSQ-34 also shows a sensitivity value of 99% and specificity of 98% with a cutoff value of  $\geq 81.5$  [5].

### Hospital anxiety and depression scale (HADS)

HADS was developed by Zigmond and Snaith in 1983 to identify anxiety and depression cases in non-psychiatry clinics. HADS consists of two subscales; anxiety and depression subscale. HADS is a self-reporting questionnaire, consisting of 14 questions that are scaled from 0 (never) to 3 (very often). Total score of 16 indicates severe form of disorder, 11–15 indicates moderate, 8–10 indicates mild case, and  $< 7$  indicates no form of depression or anxiety. In Indonesia, HADS has been validated by Widyadharma *et al.* in 2015. They also found that inter-rater agreement of HADS-A is 0.706, showing that HADS-A has a good reliability [6].

### Statistical analysis

We chose to use Kolmogorov–Smirnov test to assess the normality of the data as our sample accounts for more than 50 persons ( $n = 135$ ). To assess the correlation between BSQ-34 and HADS score, we used Pearson correlation test as both of our variables are numeric and data distribution was found normal.

## Results

As shown from Table 1, the average age of our respondents was  $23.57 \pm 5.657$  and majority of them were graduated from high school ( $n = 97$ , 72%) and are not married yet ( $n = 109$ , 81%). Less than half admitted to have already worked for more than a year and we also found that most sales women in our study earned less than minimum standard wage a month ( $n = 103$ , 76%).

**Table 1: Sample characteristics**

	Value (n = 135)	
	Mean $\pm$ SD	n (%)
Age (year)	23.57 $\pm$ 5.657	
Education		
Junior high school		4 (2)
Senior high school		97 (72)
University		34 (26)
Marital status		
Married		26 (19)
Not married		109 (81)
Employment duration (year)		
< 1		89 (66)
> 1		46 (34)
Monthly wages		
< Minimum standard wages		103 (76)
> Minimum standard wages		32 (24)

From Table 2, we found that all of our respondents showed BSQ-score of above 81 (82.14  $\pm$  4.530), indicating that all are slightly preoccupied with body shape concern. We also found that all respondents

**Table 2: BSQ-34 score**

Variable	n	Mean $\pm$ S.D
BSQ-34 score	135	82.14 $\pm$ 4.530

showed borderline anxiety score with average score of  $8.20 \pm 3.256$ , as shown in Table 3.

**Table 3: HADS-A score**

Variable	n	Mean $\pm$ S.D
HADS-A score	135	$8.20 \pm 3.256$

Pearson correlation test (Table 4) showed that there is a significant positive moderate strength correlation between body shape concern and anxiety severity ( $r = 0.413$ ,  $p = 0.002$ ).

**Table 4: Pearson correlation test of BSQ-34 and HADS-A score**

Variable	Mean $\pm$ (S.D)	r	p-value
BSQ-34	$82.14 \pm 4.530$	0.413	0.002
HADS-A	$8.20 \pm 3.256$		

## Discussion

The results of this study revealed a significant positive relationship between the body shape concern and anxiety among saleswoman; our hypothesis was confirmed. This finding is consistent with the results of a qualitative study where the results of that research are the causes of anxiety, perceived anxiety, anxiety support factors, efforts to overcome anxiety, and the factors that influence the efforts to overcome anxiety [7]. Another research implies that the more satisfied one is with his/her body image, the more likely it is that he/she will experience higher or better psychological well-being. It means that body image defects caused by obesity could be related to negative psychological well-being [8]. However, another study showed that obese girls could have body dissatisfaction but had good psychological well-being, so they tended to be more extraverted, have more close friends, and receive greater family support. The reason for the difference in the results of this study with the present study could be the difference in the studied samples (type and number) and the method used [9].

According to the result of a research, about 50–80% of adolescent girls have a negative feelings regarding body shape and size [10]. That is because the ideal body, slim and attractive, is a dream for every girl, especially for saleswomen. Another research stated that 40–70% of adolescent girls feel dissatisfied with two or more parts of their body, especially the hips, buttocks, stomach and thighs [11]. According to another article, beautiful girls have the benefits in partner selection. Social psychology studies have provided sufficient support for significant interpersonal gain enjoyed by beautiful woman who fits the standard of public beauty. Beauty is the main component of female gender role stereotypes [12].

The anxiety felt by respondents which is caused by internal factors and external factors. The internal factors from the respondent themselves are comparison

of body shapes, comparison of ways to dress, respondent characteristics, ideal body shape perception, anxiety from feeling not attractive enough to sell the product. A study found that the cause of anxiety in teenage girls with over weight is style sedentary life, risk of disease, overweight, and information from media [13].

Disturbed self-perception is usually associated with preoccupation, insecure attitude, or seeking reassurance in peer's opinion. An explanation for this insecurity is the fashion industry's controversial promotion of underweight models and unrealistic imagery, which in time created the Western cultural pattern. The question which arises is how could this postmodern society to overcome the 21<sup>st</sup> century frustration, depressions, anxieties, and psychoses when natural beauty has been annulated by Botox's dictatorship [13].

According to research, in the present study, there is a significant gender difference between males and females with regard body image, woman experience more anxiety than men [7]. Anxiety about body shape looks more occurs in woman than in men. This condition is caused by differences in the brain and hormones in woman related to reproductive processes in woman, such as menstruation, pregnancy, and menopause [7].

## Conclusion

It is evident that there is a correlation between BSQ-34 score and HADS-A score among women in which, interestingly, even the slightest preoccupation of body shape concern may rise to anxiety. We also admit that our study has limitation as we only did the assessment among saleswomen. Therefore, less stigmatizing and stereotyping beauty standards, particularly among women, are strongly encouraged and awareness should be brought to presence regarding this issue.

## Authors' Contributions

All authors contributed equally to this work.

## Acknowledgments

The authors express their gratitude to the Department of Psychiatry, Faculty of Medicine, Universitas Sumatera Utara, Indonesia, and all the participants of this study.

## Ethics Approval and Consent to Participate

The Research Ethics Committee approved this study at the Faculty of Medicine, Universitas Sumatra Utara, with the letter number 670/KEP/USU/2021 on December 19, 2020. All participants write and sign a consent to participate before attending this study. Data will not be shared to respect the privacy of the participant.

## References

- Pawijit Y, Likhitsuwan W, Ludington J, Pisitsungkagarn K. Looks can be deceiving: Body image dissatisfaction relates to social anxiety through fear of negative evaluation. *Int J Adolesc Med Health*. 2019;31(4):31. <https://doi.org/10.1515/ijamh-2017-0031> PMID:28682783
- Han Z. Body image, social anxiety and psychological distress among young adults. *Int Robot Autom J*. 2018;4(2):567-71. <https://doi.org/10.15406/iratj.2018.04.00102>
- Satghare P, Mahesh MV, Abdin E, Chong SA, Subramaniam M. The relative associations of body image dissatisfaction among psychiatric out-patients in Singapore. *Int J Environ Res Public Health*. 2019;16(24):5162. <https://doi.org/10.3390/ijerph16245162> PMID:31861178
- Derenne JL, Baker CW, Delinsky SS, Becker AE. Clinical ratings scales and assessment in eating disorders. In: Baer L, Blais MA, editors. *Handbook of Clinical Rating Scales and Assessment in Psychiatry and Mental Health*. New York: Humana Press; 2010. p. 153-60.
- Wade T. Body shape questionnaire. In: Wade T, editor. *Encyclopedia of Feeding and Eating Disorders*. Singapore: Springer Nature Singapore Pte Ltd.; 2016. p. 1-4.
- Rudy M, Widyadharna IP, Adnyana IM. Reliability Indonesian Version of the Hospital Anxiety and Depression Scale (HADS) of Stroke Patients in Sanglah General Hospital Denpasar. *Research Gate*; 2015.
- Kornapalli SE, Macharapu R, Kumar MV, Mallepalli PK, Babu RS, Graduate P. The relationship between body shape concern, self-esteem, social anxiety and body mass index in college students. *Telangana J Psychiatry*. 2017;3(2):78-84. <https://doi.org/10.18231/2455-8559.2017.0019>
- Yazdani N, Hosseini SV, Amini M, Sobhani Z, Sharif F, Khazraei H. Relationship between body image and psychological well-being in patients with morbid obesity. *Int J Community Based Nurs Midwifery*. 2018;6(2):175-84. <https://doi.org/10.30476/ijcbnm.2018.40825> PMID:29607346
- Delfabbro PH, Winefield AH, Anderson S, Hammarström A, Winefield H. Body image and psychological well-being in adolescents: The relationship between gender and school type. *J Genet Psychol*. 2011;172(1):67-83. <https://doi.org/10.1080/00221325.2010.517812> PMID:21452753
- Husni HK, Indrijati H. The effect of social comparison on models in beauty advertisements on television on the body image of obese adolescent girls. *J Psikol Pendidikan Perkembangan*. 2014;3(3):207-12.
- Hanum N, Riani ST. Pengaruh body dissatisfaction dan self-esteem dengan perilaku diet mahasiswa universitas "x" serta tinjauan dalam Islam. *J Psikogene*. 2014;2(2):180-90.
- dan Pruzinsky C. *Body Image: A Handbook of Theory, Research, and Clinical Practice*. New York: The Guilford Press; 2002.
- Kurniawati NW, Suarya LM. Anxiety picture of adolescent girls with excess weight. *J Psikol Udayana*. 2019;6(2):280. <https://doi.org/10.24843/jpu.2019.v06.i02.p07>